

ABSTRACT OF THE DISCLOSURE

A semiconductor device including a p-channel MIS transistor and using a high-dielectric-constant film as its gate insulating film is configured to prevent a p-type impurity from undesirably diffusing from a p-type silicon layer used as the gate electrode through a gate insulating film into the underlying semiconductor substrate, thereby to prevent fluctuation of the threshold voltage of the p-channel MIS transistor. For this purpose, the p-channel MIS transistor is fabricated by forming a nitride film by nitriding of the top surface of the high-dielectric-constant film formed on a silicon substrate, then forming the gate electrode including boron-doped p-type polycrystalline silicon layer on the nitride layer such that the enhanced dielectric layer and the on nitride layer function as the gate insulating film as a whole, and thereafter forming a source region and a drain region both of a p⁺-type in a self aligned manner with the gate electrode.